

Title (en)
SPECIFIC SITES FOR MODIFYING ANTIBODIES TO MAKE IMMUNOCONJUGATES

Title (de)
SPEZIFISCHE STELLEN ZUR MODIFIZIERUNG VON ANTIKÖRPER ZUR HERSTELLUNG VON IMMUNKONJUGATEN

Title (fr)
SITES SPÉCIFIQUES DE MODIFICATION D'ANTICORPS POUR FABRIQUER DES IMMUNOCONJUGUÉS

Publication
EP 3929217 A3 20220302 (EN)

Application
EP 21164085 A 20140207

Priority
• US 201361762563 P 20130208
• EP 14706739 A 20140207
• US 2014015393 W 20140207

Abstract (en)
The present invention provides specific sites for modifying antibodies or antibody fragments by replacing at least one native amino acid in the constant region of a parental antibody or antibody fragment with cysteine, which can be used as a site of attachment for a payload or linker-payload combination.

IPC 8 full level
C07K 16/30 (2006.01); **A61K 47/68** (2017.01); **A61P 35/00** (2006.01)

CPC (source: EP KR US)
A61K 47/6803 (2017.08 - EP KR US); **A61K 47/6817** (2017.08 - EP KR US); **A61K 47/6855** (2017.08 - EP KR US);
A61K 47/6871 (2017.08 - EP KR US); **A61P 35/00** (2018.01 - EP KR); **C07K 16/32** (2013.01 - EP KR US); **A61K 2039/505** (2013.01 - KR);
C07K 16/2863 (2013.01 - US); **C07K 2317/24** (2013.01 - KR US); **C07K 2317/31** (2013.01 - KR); **C07K 2317/73** (2013.01 - KR US);
C07K 2317/94 (2013.01 - US)

Citation (search report)
• [XY] WO 2006034488 A2 20060330 - GENENTECH INC [US], et al
• [IY] WO 2009092011 A1 20090723 - MEDIMMUNE LLC [US], et al
• [X] WO 2010141902 A2 20101209 - NOVARTIS AG [CH], et al
• [A] US 2012009621 A1 20120112 - YAMASAKI MOTOO [JP], et al
• [XP] WO 2013093809 A1 20130627 - PFIZER [US]
• [XP] WO 2013185115 A1 20131212 - SUTRO BIOPHARMA INC [US]
• [X] WO 2008020827 A2 20080221 - BIOGEN IDEC INC [US], et al
• [XD] WO 2011005481 A1 20110113 - MEDIMMUNE LLC [US], et al
• [X] WO 2011061246 A2 20110526 - UCB PHARMA SA [BE], et al
• [X] WO 2011156328 A1 20111215 - GENENTECH INC [US], et al
• [XP] WO 2013096291 A2 20130627 - MEDIMMUNE LLC [US]
• [X] US 5219996 A 19930615 - BODMER MARK W [GB], et al
• [X] WO 2011061492 A2 20110526 - UCB PHARMA SA [BE], et al
• [AP] ANONYMOUS: "www.bioinf.org.uk : Dr. Andrew C.R. Martin's Group at UCL", 25 February 2014 (2014-02-25), XP055122195, Retrieved from the Internet <URL:http://www.bioinf.org.uk/abs/> [retrieved on 20140606]
• [XD] VOYNOV VLADIMIR ET AL: "Design and application of antibody cysteine variants", BIOCONJUGATE CHEMISTRY, ACS, WASHINGTON, DC, US, vol. 21, no. 2, 17 February 2010 (2010-02-17), pages 385 - 392, XP002598497, ISSN: 1043-1802, [retrieved on 20100121], DOI: 10.1021/BC900509S
• [I] W. OU ET AL: "Site-specific protein modifications through pyrroline-carboxy-lysine residues", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, vol. 108, no. 26, 28 June 2011 (2011-06-28), pages 10437 - 10442, XP055122289, ISSN: 0027-8424, DOI: 10.1073/pnas.1105197108
• [AD] LYONS A ET AL: "SITE-SPECIFIC ATTACHMENT TO RECOMBINANT ANTIBODIES VIA INTRODUCED SURFACE CYSTEINE RESIDUES", PROTEIN ENGINEERING, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 3, no. 8, 1 January 1990 (1990-01-01), pages 703 - 708, XP001000052, ISSN: 0269-2139

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2014124316 A2 20140814; WO 2014124316 A3 20141127; AU 2014214751 A1 20150820; AU 2014214751 B2 20170601;
AU 2017219059 A1 20170914; BR 112015018899 A2 20150806; BR 112015018899 B1 20230926; CA 2900755 A1 20140814;
CA 2900755 C 20210720; CN 105143271 A 20151209; CN 115925957 A 20230407; DK 2953976 T3 20210621; EA 201591465 A1 20151230;
EP 2953976 A2 20151216; EP 2953976 B1 20210324; EP 3929217 A2 20211229; EP 3929217 A3 20220302; ES 2874493 T3 20211105;
HK 1213580 A1 20160708; HU E054443 T2 20210928; IL 240406 A0 20150924; IL 240406 B 20200227; JP 2016511637 A 20160421;
JP 6609477 B2 20191120; KR 102447350 B1 20220923; KR 102626525 B1 20240119; KR 20150115000 A 20151013;
KR 20210125593 A 20211018; KR 20220133313 A 20221004; MX 2015010146 A 20160531; MX 2022010324 A 20220919;
PL 2953976 T3 20211102; PT 2953976 T 20210623; SG 10201706468R A 20170928; SG 11201506025R A 20150828; SI 2953976 T1 20210831;
US 11596695 B2 20230307; US 2016067351 A1 20160310; US 2020338207 A1 20201029; US 2023270876 A1 20230831

DOCDB simple family (application)
US 2014015393 W 20140207; AU 2014214751 A 20140207; AU 2017219059 A 20170824; BR 112015018899 A 20140207;
CA 2900755 A 20140207; CN 201480017839 A 20140207; CN 202210867143 A 20140207; DK 14706739 T 20140207;
EA 201591465 A 20140207; EP 14706739 A 20140207; EP 21164085 A 20140207; ES 14706739 T 20140207; HK 16101565 A 20160212;
HU E14706739 A 20140207; IL 24040615 A 20150806; JP 2015557139 A 20140207; KR 20157024027 A 20140207;
KR 20217031652 A 20140207; KR 20227032555 A 20140207; MX 2015010146 A 20140207; MX 2022010324 A 20150805;
PL 14706739 T 20140207; PT 14706739 T 20140207; SG 10201706468R A 20140207; SG 11201506025R A 20140207;
SI 201431831 T 20140207; US 201414764026 A 20140207; US 201916701576 A 20191203; US 202318178886 A 20230306